

# SAFETY DATA SHEET

Creation Date 16-Mar-2010 Revision Date 24-Dec-2021 Revision Number 7

1. Identification

Product Name Aniline

Cat No.: AC221730000; AC221730010; AC221730025; AC221730050;

AC221732500

CAS No 62-53-3

**Synonyms** Aminobenzene; Phenylamine

Recommended Use Laboratory chemicals.

**Uses advised against** Food, drug, pesticide or biocidal product use.

### Details of the supplier of the safety data sheet

Company

Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410
Fair Lawn, NJ 07410

Tel: (201) 796-7100

Emergency Telephone Number For information US call: 001-800-ACROS-01 / Europe call: +32 14 57 52 11

Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

# 2. Hazard(s) identification

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids Category 4 Acute oral toxicity Category 3 Acute dermal toxicity Category 3 Acute Inhalation Toxicity - Vapors Category 3 Serious Eye Damage/Eye Irritation Category 1 Skin Sensitization Category 1 Germ Cell Mutagenicity Category 2 Carcinogenicity Category 2 Specific target organ toxicity (single exposure) Category 3 Target Organs - Central nervous system (CNS).

Specific target organ toxicity - (repeated exposure) Category 1

Target Organs - Kidney, Liver, spleen, Blood, Cardiovascular system.

#### Label Elements

#### Signal Word

Danger

### **Hazard Statements**

Combustible liquid

May cause an allergic skin reaction

Causes serious eye damage

May cause drowsiness or dizziness

Suspected of causing genetic defects

Suspected of causing cancer

Causes damage to organs through prolonged or repeated exposure

Toxic if swallowed, in contact with skin or if inhaled



#### **Precautionary Statements**

#### Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

Do not breathe dust/fume/gas/mist/vapors/spray

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Keep cool

### Response

IF exposed or concerned: Get medical attention/advice

### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician

#### Skin

IF ON SKIN: Wash with plenty of soap and water

Call a POISON CENTER or doctor/physician if you feel unwell

Remove/Take off immediately all contaminated clothing

Wash contaminated clothing before reuse

If skin irritation or rash occurs: Get medical advice/attention

### **Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

### Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Rinse mouth

### Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

### Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

#### Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Very toxic to aquatic life with long lasting effects WARNING. Cancer - https://www.p65warnings.ca.gov/.

## 3. Composition/Information on Ingredients

Component	CAS No	Weight %
Anilin	62-53-3	>95

### 4. First-aid measures

**General Advice** Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

Eye Contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician. Immediate medical attention is required.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Immediate medical

attention is required.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth

method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Immediate medical attention is required.

**Ingestion** Do NOT induce vomiting. Call a physician or poison control center immediately.

Most important symptoms and

effects

Causes severe eye damage. May cause allergic skin reaction. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Symptoms of allergic

reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and

feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

Notes to Physician Treat symptomatically

### 5. Fire-fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. Water mist may

be used to cool closed containers.

Unsuitable Extinguishing Media No information available

**Flash Point** 76 °C / 168.8 °F

Method - No information available

Autoignition Temperature 540 °C / 1004 °F

**Explosion Limits** 

**Upper** 11 vol % **Lower** 1.3 vol %

Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

#### **Specific Hazards Arising from the Chemical**

Combustible material. Containers may explode when heated. Keep product and empty container away from heat and sources of ignition. Thermal decomposition can lead to release of irritating gases and vapors. Combustible material. Do not allow run-off from fire-fighting to enter drains or water courses.

### **Hazardous Combustion Products**

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Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NOx).

#### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA

Health	Flammability	Instability	Physical hazards
3	2	0	N/A

## 6. Accidental release measures

**Personal Precautions** 

Ensure adequate ventilation. Use personal protective equipment as required. Keep people away from and upwind of spill/leak, Evacuate personnel to safe areas, Remove all sources of ignition. Take precautionary measures against static discharges.

**Environmental Precautions** 

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

Up

Methods for Containment and Clean Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition.

## 7. Handling and storage

Handling

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance. Keep away from open flames, hot surfaces and sources of ignition.

Storage.

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame. Protect from sunlight. Incompatible Materials. Acids. Alkali metals. Oxidizing agent.

# 8. Exposure controls / personal protection

### **Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Anilin	TWA: 2 ppm	(Vacated) TWA: 2 ppm	IDLH: 100 ppm	TWA: 2 ppm
	Skin	(Vacated) TWA: 8 mg/m <sup>3</sup>		
		Skin		
		TWA: 5 ppm		
		TWA: 19 mg/m <sup>3</sup>		

### Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health

**Engineering Measures** 

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment** 

Wear appropriate protective eyeglasses or chemical safety goggles as described by **Eye/face Protection** 

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

### 9. Physical and chemical properties

Physical State Liquid Appearance Light yellow

Odor aromatic Amine compounds
Odor Threshold No information available

**pH** 8.8 36 g/L aq.sol **Melting Point/Range** -6.2 °C / 20.8 °F

**Boiling Point/Range** 181 - 185 °C / 357.8 - 365 °F @ 760 mmHg

Flash Point 76 °C / 168.8 °F
Evaporation Rate 1 (Butyl acetate = 1.0)
Flammability (solid,gas) Not applicable

Flammability or explosive limits

 Upper
 11 vol %

 Lower
 1.3 vol %

 Vapor Pressure
 0.5 mmHg @ 20 °C

 Vapor Density
 3.3 (Air = 1.0)

 Specific Gravity
 1.021

 Specific Gravity
 2.5 (White is water)

SolubilitySoluble in waterPartition coefficient; n-octanol/waterNo data availableAutoignition Temperature540 °C / 1004 °F

**Decomposition Temperature** 190 °C

Viscosity 4.4 mPa.s at 20 °C

Molecular FormulaC6 H7 NMolecular Weight93.13

## 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

**Stability** Stable under normal conditions. Light sensitive.

Conditions to Avoid Incompatible products. Heat, flames and sparks. Exposure to light. Keep away from open

flames, hot surfaces and sources of ignition.

Incompatible Materials Acids, Alkali metals, Oxidizing agent

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx)

Hazardous Polymerization Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity** 

# **Product Information**

**Component Information** 

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Anilin	LD50 = 440 mg/kg (Rat)	LD50 = 442 mg/kg (Rat)	1 mg/L(Rat)4 h 1.82 mg/L(Rat)4 h
			1.02 mg/L ( Nat ) 4 m

Toxicologically Synergistic No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

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Irritation Severe eve irritant

Sensitization May cause sensitization by skin contact

Carcinogenicity Limited evidence of a carcinogenic effect.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Anilin	62-53-3	Group 2A	Not listed	A3	Χ	A3

ACGIH: (American Conference of Governmental Industrial

Mexico - Occupational Exposure Limits - Carcinogens

Hygienists)

A1 - Known Human Carcinogen A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

ACGIH: (American Conference of Governmental Industrial Hygienists)

Mexico - Occupational Exposure Limits - Carcinogens

A1 - Confirmed Human Carcinogen A2 - Suspected Human Carcinogen A3 - Confirmed Animal Carcinogen

A4 - Not Classifiable as a Human Carcinogen A5 - Not Suspected as a Human Carcinogen

**Mutagenic Effects** Category 2

No information available. **Reproductive Effects Developmental Effects** No information available. No information available. **Teratogenicity** 

STOT - single exposure Central nervous system (CNS)

STOT - repeated exposure Kidney Liver spleen Blood Cardiovascular system

**Aspiration hazard** No information available

delayed

Symptoms / effects,both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

No information available **Endocrine Disruptor Information** 

Other Adverse Effects The toxicological properties have not been fully investigated.

## 12. Ecological information

#### **Ecotoxicity**

The product contains following substances which are hazardous for the environment. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Anilin	Not listed	Oncorhynchus mykiss: LC50	EC50 = 425 mg/L 5 min	EC50 = 0.16 mg/L 48h
		= 10.96  mg/L  96 h	EC50 = 488  mg/L  15  min	

Persistence and Degradability

Persistence is unlikely

**Bioaccumulation/ Accumulation** 

No information available.

Mobility

Will likely be mobile in the environment due to its water solubility.

Component	log Pow
Anilin	0.9

## 13. Disposal considerations

**Waste Disposal Methods** 

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Anilin - 62-53-3	U012	=

## 14. Transport information

DOT

UN-No UN1547
Proper Shipping Name ANILINE
Hazard Class 6.1
Packing Group II

TDG

UN-No UN1547
Proper Shipping Name ANILINE
Hazard Class 6.1
Packing Group II

IATA

UN-No UN1547
Proper Shipping Name Aniline
Hazard Class 6.1
Packing Group II

IMDG/IMO

UN-No UN1547
Proper Shipping Name Aniline
Hazard Class 6.1
Packing Group II

## 15. Regulatory information

### **United States of America Inventory**

	Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
ĺ	Anilin	62-53-3	Х	ACTIVE	-

### Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

## International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Anilin	62-53-3	Х	-	200-539-3	Χ	Х	Х	Х	Х	KE-01180

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

#### U.S. Federal Regulations

### **SARA 313**

Component	CAS No	Weight %	SARA 313 - Threshold
•			Values %
Anilin	62-53-3	>95	1.0

SARA 311/312 Hazard Categories See section 2 for more information

**CWA (Clean Water Act)** 

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Anilin	X	5000 lb	-	-

Clean Air Act

	Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Ī	Anilin	X		-

**OSHA** - Occupational Safety and

Health Administration

Not applicable

**CERCLA** 

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Anilin	5000 lb	5000 lb

### **California Proposition 65**

This product contains the following Proposition 65 chemicals.

Component	CAS No	California Prop. 65	Prop 65 NSRL	Category	
Anilin	62-53-3	Carcinogen	100 μg/day	Carcinogen	

# U.S. State Right-to-Know

Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Anilin	X	X	Х	Χ	X

**U.S. Department of Transportation** 

Reportable Quantity (RQ): Y
DOT Marine Pollutant Y
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade Moderate risk, Grade 2

## Authorisation/Restrictions according to EU REACH

Component	,	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	· · · · · · · · · · · · · · · · · · ·
Anilin	-	Use restricted. See item 75. (see link for restriction details)	-

https://echa.europa.eu/substances-restricted-under-reach

## Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Anilin	62-53-3	Listed	Not applicable	Not applicable	Not applicable
Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities	Seveso III Directive (2012/18/EC) - Qualifying Quantities	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)

		for Major Accident Notification	for Safety Report Requirements		
Anilin	62-53-3	Not applicable	Not applicable	Not applicable	Not applicable

## 16. Other information

Prepared By Regulatory Affairs

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

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**Revision Summary** SDS sections updated. 11.

#### **Disclaimer**

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**End of SDS**